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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,233	08/01/2001	Christian Knopfle	60,500-072	6017

27305 7590 01/04/2005

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EXAMINER

PHILOGENE, PEDRO

ART UNIT	PAPER NUMBER
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3732

DATE MAILED: 01/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/921,233		KNOPFLE ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Pedro Philogene		3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,5,6,10,11,29-31,38-41 and 44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5,6,10,11,29-31,38-41 and 44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/04/04</u> . | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,6, 10,11, 29-31, 38-41,44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manthrop et al. (5,916,217).

With respect to claims 1, 29-31, 38-41 Manthrop et al disclose a self-retaining implant for attaching a bone cover or a bone fragment to a skull, the implant (110) comprising a support element (112,118) having an upper side and a lower side an extension (124) extending substantially at a right angle from the lower side of the support element to an end remote from the support element and substantially straight between the support element and the end; at least one spike (132) such that the spike can be driven laterally into the bone cover or bone fragment prior to positioning the bone cover or bone fragment adjacent to the skull; as set forth in column 3, lines 32-57; as best seen in Fig. 3; wherein the support element comprises two support arms; as best seen in FIG.3, extending in opposite direction from the extension (124) with the first of the two support arms defining a screw hole therein for receiving a fastener (140) to secure the first support arm to the skull after the spike has been driven laterally into the bone cover or bone fragment and after positioning the bone cover or bone fragment adjacent to the skull and the second of the two support arms for cooperating with the

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bone cover or bone fragment when driving the spike laterally into the bone cover or bone fragment; as set forth in column 3, lines 32-57.

It is noted that Manthrop et al did not teach of at least one spike extending substantially parallel to the support element, as claimed by applicant. However, Manthrop et al teach of a spike forming an angle with the extension. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to reach the 90 degrees angle, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, USPQ 233; or discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

With respect to claim 6, Manthrop et al discloses an implant wherein the spike extends from an end of the extension remote from the support element; as best seen in FIG.3.

With respect to claim 44, the method steps, as set forth, would have been obviously carried out in the operation of the device, as set forth above.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Manthrop et al. (5,916,217) in view of Hair (6,197,037).

With respect to claim 5, it is noted that Manthrop et al did not teach of a lower side of the support having a concave or spherically curved at least in section; as claimed by applicant. However, in a similar art, Hair evidences the use of a fastener

having a concave or spherically curved lower side to tightly engage the outer surface of the bone and promote gripping action.

Therefore, given the teaching of Hair, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the curved lower surface of the device of Hair in the device of Manthrop et al. side to tightly engage the outer surface of the bone and promote gripping action.

Claims 10, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Manthrop (5,916,217) in view of Hair (6,197,037) in view of Pohndorf et al. (5,904,683).

With respect to claim 10, it is noted that the above combination of references did not teach of a support element having a thickness increasing in the direction of the screw hole; as claimed by applicant. However, Pohndorf et al. evidence the use of a support element having a thickness increasing in the direction of the screw hole to strengthen the support element for receiving a screw and stabilize a bone.

Therefore, given the teaching of Pohndorf et al., it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the increasing thickness of Pohndorf et al in the support element of Manthrop/Hair to strengthen the support element for receiving a screw and stabilize a bone.

With respect to claim 11, Pohndorf et al teach a screw hole that is spherically curved, as best seen in FIG.11.

### ***Response to Amendment***

Applicant's arguments with respect to claims 1,5,6,10,11,29-31,38-41,44 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro Philogene whose telephone number is (571) 272-4716. The examiner can normally be reached on Monday to Friday 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pedro Philogene  
December 29, 2004

  
PEDRO PHILOGENE  
PRIMARY EXAMINER